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| 10/564,918 | 01/17/2006 | Linda Leech | GB030118 | 5318 |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | |
|------------------------------|--------------------------|------------------|
| Office Action Summary | Application No. | Applicant(s) |
| | 10/564,918 | LEECH, LINDA |
| | Examiner Junpeng Chen | Art Unit 2618 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 01 March 2007.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-4 and 6-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-4 and 6-20 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) Notice of Informal Patent Application
- 6) Other: _____.

DETAILED ACTION

1. This action is in response to applicant's amendment/arguments filed on 02/16/2007. Applicant cancelled claim 5 and added claim 5's limitation(s) to claim 1 (i.e. without adding all the claim(s) that claim 5 was depending on). Currently, Claims 1-4 and 6-20 are pending. **This action is made FINAL.**

Response to Arguments

2. Applicant's arguments with respect to amended claims 1, 4 and newly added claim 17 have been considered but are moot in view of the new ground(s) of rejection.

Claim Objections

3. **Claim 18** is objected to because of the following informalities:

a) On line 3 of **claim 18**, delete "a" after "control";

Appropriate correction is required.

Claim Rejections - 35 USC § 103

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4, 6, 8, 9, 14,15 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Arimitsu (U.S. PGPub 2003/0104849 A1)** in view of **Weinfield et al. (U.S. PGPub 2003/0144042 A1)** in further view of **Reichelt (U.S. Patent 6,345,180)**.

Consider **claim 1**, Arimitsu discloses a method for managing power consumption of a radio device powered by a battery having a battery capacity (Figure 1), the method comprising the acts of:

performing a radio function of the radio device according to a first operating mode (*read as the mobile terminal operates intermittently with period T as shown in Figure 4(a), abstract, paragraph [0047]*);

monitoring the battery capacity by the radio device (*read as battery voltage detector 13 detects the battery voltage V, abstract, paragraphs [0030] and [0047]-[0048]*); and

where the battery capacity is less than a pre-determined amount, maintaining by the radio device the radio function according to a second operating mode in place of the first operating mode, wherein second operating mode has a reduced rate of power consumption in relation to the radio function compared to the first operating mode (*read as the battery voltage V detected by voltage detector 18 is lower than the first threshold voltage V1 and equal to or higher than the second threshold voltage V2, the controller 14 performs a limited cell-search operation, which the controller 14 sends a command signal to the frequency monitor 19 to cause it to tune to frequency f2 to monitor a signal from other base station intermittently with period nXT (where n is an integer equal to or*

greater than 2 and the integer n is appropriately determined based on the configuration of the network), paragraph [0048]).

However, Arimitsu fails to specifically disclose wherein the radio function is associated with determining the location of the device and the frequency of the determination of the mobile device's location is reduced to reduce power consumption compared to the first operating mode.

Nonetheless, in related art, Weinfield discloses that during lower battery life, a mobile station would report position information to the network, therefore, the mobile station inherently determines position of itself to generate the position information to be reported to the network, Figure 4, abstract, paragraphs [0028]-[0030]).

Therefore, it would have been obvious for a person with ordinary skill in the art at the time the invention was made to incorporate the teachings of Weinfield into the teachings of Arimitsu for the purpose of allowing the base station to know where the mobile terminal is located.

However, Arimitsu, as modified by Weinfield, discloses that it is the mobile device that determines the position of itself but fails to specifically disclose the frequency of the determination of the mobile device's location is reduced to reduce power consumption compared to the first operating mode.

Nonetheless, in related art, Reichelt discloses a mobile terminal reserve power system, and that power must be consumed during the process of position updates, lines 40-44 of column 1.

Therefore, it would have been obvious for a person with ordinary skill in the art at the time the invention was made to incorporate the teachings of Reichelt into the teachings of Arimitsu, which modified by Weinfield, to reduce the frequency of determination of location compared to the first operating mode for the purpose of making the mobile terminal to consuming less power during low power level.

Consider **claim 2, as applied to claim 1 above**, Arimitsu, as modified by Wienfield and Reichelt, discloses a method, wherein the second operating mode comprises receiving a radio signal by means of polling (*read as the battery voltage V detected by voltage detector 18 is lower than the first threshold voltage V1 and equal to or higher than the second threshold voltage V2, the controller 14 performs a limited cell-search operation, which the controller 14 sends a command signal to the frequency monitor 19 to cause it to tune to frequency f2 to monitor a signal from other base station intermittently with period nXT (where n is an integer equal to or greater than 2 and the integer n is appropriately determined based on the configuration of the network), paragraph [0048]*).

Consider **claim 3, as applied to claim 1 above**, Arimitsu, as modified by Wienfield and Reichelt, discloses the claimed invention above but fails to specifically discloses wherein the second operating mode comprises sending a request radio signal and subsequently receiving an associated response radio signal.

However, in related art, Weinfield further discloses that during lower battery life, a mobile station transmits the information about the battery power is to the network, the network responses to the mobile station and to have the mobile station to adjust the rate

at which the position information is reported from the mobile station, Figures 1-3, abstract, paragraph [0005].

Therefore, it would have been obvious for a person with ordinary skill in the art at the time the invention was made to incorporate the teachings of Weinfield into the teachings of Arimitsu, which modified by Wienfield and Reichelt, for the purpose of making the mobile terminal to consuming less power during low power level.

Consider **claim 4**, Arimitsu discloses a system comprising:

a first radio device which is powered by a battery having a battery capacity (read as mobile terminal having battery 17, Figure 1), and a second radio device (read as the base station, paragraph [0029]), the devices being operable to communicate by means of radio signals (read as the mobile terminal and base station are inherently communicating using RF signals), wherein the device is configured to:

perform a radio function according to the first operating mode (*read as the mobile terminal operates intermittently with period T as shown in Figure 4(a), abstract, paragraph [0047]*);

monitor the battery capacity (*read as battery voltage detector 13 detects the battery voltage V, abstract, paragraphs [0030] and [0047]-[0048]*); and

when the battery capacity is less than a pre-determined amount, maintain the radio function according to a second operating mode in place of the first operating mode, wherein the second operating mode has a reduced rate of power consumption in relation to the radio function compared to the first operating mode (*read as the battery voltage V detected by voltage detector 18 is lower than the first threshold voltage V1*

and equal to or higher than the second threshold voltage V2, the controller 14 performs a limited cell-search operation, which the controller 14 sends a command signal to the frequency monitor 19 to cause it to tune to frequency f2 to monitor a signal from other base station intermittently with period nXT (where n is an integer equal to or greater than 2 and the integer n is appropriately determined based on the configuration of the network), paragraph [0048]).

However, Arimitsu fails to specifically disclose wherein the radio function is associated with determining the location of the device and the frequency of the determination of the mobile device's location is reduced to reduce power consumption compared to the first operating mode.

Nonetheless, in related art, Weinfield discloses that during lower battery life, a mobile station would report position information to the network, therefore, the mobile station inherently determines position of itself to generate the position information to be reported to the network, Figure 4, abstract, paragraphs [0028]-[0030]).

Therefore, it would have been obvious for a person with ordinary skill in the art at the time the invention was made to incorporate the teachings of Weinfield into the teachings of Arimitsu for the purpose of allowing the base station to know where the mobile terminal is located.

However, Arimitsu, as modified by Weinfield, fails to specifically disclose the frequency of the determination of the mobile device's location is reduced to reduce power consumption compared to the first operating mode.

Nonetheless, in related art, Reichelt discloses a mobile terminal reserve power system, and that power must be consumed during the position updates, lines 40-44 of column 1.

Therefore, it would have been obvious for a person with ordinary skill in the art at the time the invention was made to incorporate the teachings of Reichelt into the teachings of Arimitsu, which modified by Weinfield, to reduce the frequency of determination of location compared to the first operating mode for the purpose of making the mobile terminal to consuming less power during low power level.

Consider **claim 6, as applied to claim 4 above**, Arimitsu, as modified by Wienfield and Reichelt, further discloses the radio device is a cordless telephone (read as the mobile terminal, paragraph [0045]).

Consider **claim 8, as applied to claim 4 above**, Arimitsu, as modified by Wienfield and Reichelt, discloses a battery powered radio device, wherein the radio function is associated with receipt of data (read as *the mobile terminal receives the standby signal and other frequency signal, abstract, paragraph [0047]*).

Consider **claim 9, as applied to claim 8 above**, Arimitsu, as modified by Wienfield and Reichelt, discloses a battery powered radio device, wherein the battery powered radio device is a mobile telephone (read as *the mobile terminal, abstract, paragraph [0045]*).

Consider **claim 14, as applied to claim 4 above**, Arimitsu, as modified by Wienfield and Reichelt, discloses a method, wherein the second operating mode comprises receiving a radio signal by means of polling (read as *the battery voltage V*

detected by voltage detector 18 is lower than the first threshold voltage V1 and equal to or higher than the second threshold voltage V2, the controller 14 performs a limited cell-search operation, which the controller 14 sends a command signal to the frequency monitor 19 to cause it to tune to frequency f2 to monitor a signal from other base station intermittently with period nXT (where n is an integer equal to or greater than 2 and the integer n is appropriately determined based on the configuration of the network), paragraph [0048]).

Consider **claim 15, as applied to claim 4 above**, Arimitsu, as modified by Wienfield and Reichelt, discloses the claimed invention above but fails to specifically discloses wherein the second operating mode comprises sending a request radio signal and subsequently receiving an associated response radio signal.

However, in related art, Weinfield further discloses that during lower battery life, a mobile station transmits the information about the battery power is to the network, the network responses to the mobile station and to have the mobile station to adjust the rate at which the position information is reported from the mobile station, Figures 1-3, abstract, paragraph [0005].

Therefore, it would have been obvious for a person with ordinary skill in the art at the time the invention was made to incorporate the teachings of Weinfield into the teachings of Arimitsu, which modified by Wienfield and Reichelt, for the purpose of making the mobile terminal to consuming less power during low power level.

Consider **claim 17**, Arimitsu discloses a battery powered radio device comprising:

a battery having a battery capacity (read as battery 17, Figure 1); and means for communicating with a further radio device by radio signals (read as mobile terminal communicates with base band by RF signals, Figure 1, [0029] and [0045]-[0048]), means for performing a radio function according to the first operating mode (read as *the mobile terminal operates intermittently with period T as shown in Figure 4(a), abstract, paragraph [0047]*); means for monitoring the battery capacity (read as battery voltage detector 13 detects the battery voltage V, abstract, paragraphs [0030] and [0047]-[0048]); and means for maintaining the radio function according to a second operating mode in place of the first operating mode when the battery capacity is less than a pre-determined amount, wherein the second operating mode has a reduced rate of power consumption in relation to the radio function compared to the first operating mode (read as *the battery voltage V detected by voltage detector 18 is lower than the first threshold voltage V1 and equal to or higher than the second threshold voltage V2, the controller 14 performs a limited cell-search operation, which the controller 14 sends a command signal to the frequency monitor 19 to cause it to tune to frequency f2 to monitor a signal from other base station intermittently with period nXT (where n is an integer equal to or greater than 2 and the integer n is appropriately determined based on the configuration of the network), paragraph [0048]*).

However, Arimitsu fails to specifically disclose wherein the radio function is associated with determining the location of the device and the frequency of the

determination of the mobile device's location is reduced to reduce power consumption compared to the first operating mode.

Nonetheless, in related art, Weinfield discloses that during lower battery life, a mobile station would report position information to the network, therefore, the mobile station inherently determines position of itself to generate the position information to be reported to the network, Figure 4, abstract, paragraphs [0028]-[0030]).

Therefore, it would have been obvious for a person with ordinary skill in the art at the time the invention was made to incorporate the teachings of Weinfield into the teachings of Arimitsu for the purpose of allowing the base station to know where the mobile terminal is located.

However, Arimitsu, as modified by Weinfield, fails to specifically disclose the frequency of the determination of the mobile device's location is reduced to reduce power consumption compared to the first operating mode.

Nonetheless, in related art, Reichelt discloses a mobile terminal reserve power system, and that power must be consumed during the position updates, lines 40-44 of column 1.

Therefore, it would have been obvious for a person with ordinary skill in the art at the time the invention was made to incorporate the teachings of Reichelt into the teachings of Arimitsu, which modified by Weinfield, to reduce the frequency of determination of location compared to the first operating mode for the purpose of making the mobile terminal to consuming less power during low power level.

Consider **claim 19, as applied to claim 17 above**, Arimitsu, as modified by Wienfield and Reichelt, discloses a method, wherein the second operating mode comprises receiving a radio signal by means of polling (*read as the battery voltage V detected by voltage detector 18 is lower than the first threshold voltage V1 and equal to or higher than the second threshold voltage V2, the controller 14 performs a limited cell-search operation, which the controller 14 sends a command signal to the frequency monitor 19 to cause it to tune to frequency f2 to monitor a signal from other base station intermittently with period nXT (where n is an integer equal to or greater than 2 and the integer n is appropriately determined based on the configuration of the network), paragraph [0048]*).

Consider **claim 20, as applied to claim 17 above**, Arimitsu, as modified by Wienfield and Reichelt, discloses the claimed invention above but fails to specifically disclose wherein the second operating mode comprises sending a request radio signal and subsequently receiving an associated response radio signal.

However, in related art, Weinfield further discloses that during lower battery life, a mobile station transmits the information about the battery power to the network, the network responds to the mobile station and to have the mobile station to adjust the rate at which the position information is reported from the mobile station, Figures 1-3, abstract, paragraph [0005].

Therefore, it would have been obvious for a person with ordinary skill in the art at the time the invention was made to incorporate the teachings of Weinfield into the

teachings of Arimitsu, which modified by Wienfield and Reichelt, for the purpose of making the mobile terminal to consuming less power during low power level.

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Arimitsu (U.S. PGPub 2003/0104849 A1) in view of Weinfield et al. (U.S. PGPub 2003/0144042 A1), in further view of Reichelt (U.S. Patent 6,345,180), and in further view of Hansson et al. (U.S. Patent 6,339,713 B1).

Consider **claim 10, as applied to claim 9 above**, Arimitsu, as modified by Wienfield and Reichelt, discloses the above claimed limitation but fails to specifically discloses that wherein the mobile telephone is a GSM telephone operable to receive an SMS message.

However, in related art, Hansson discloses a mobile terminal working in GSM standard, which is capable of decreasing battery consumption and receiving SMS message, lines 50-60 of column 1, lines 26-43 of column 8 and lines 7-18 of column 11.

Therefore, it would have been obvious for a person with ordinary skill in the art at the time the invention was made to incorporate the teachings of Hansson into the teachings of Arimitsu, which modified by Wienfield and Reichelt, for the reason of reducing power consumption of the mobile phones that are in GSM standard and are capable of receiving SMS message.

Claims 7, 16 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Arimitsu (U.S. PGPub 2003/0104849 A1) in view of Weinfield et al. (U.S. PGPub

2003/0144042 A1), in further view of Reichelt (U.S. Patent 6,345,180), and in further view of Jones et al. (U.S. PGPub 2004/0137929 A1).

Consider **claim 7, as applied to claim 4 above**, Arimitsu, as modified by Wienfield and Reichelt, disclosed the claimed invention above but fails to disclose wherein first battery powered radio device is a remote control handset.

Nonetheless, in related art, Jones discloses that a cell phone can be a remote controller and controls a television or a home entertainment system, Figure 1, paragraph [0223].

Therefore, it would have been obvious for a person with ordinary skill in the art at the time the invention was made to incorporate the teaching of Jones into the teachings of Arimitsu, which modified by Wienfield and Reichelt, for the purpose of improving remote controlled system to enable inexpensive controllers to control multiple different devices without the hassles of preprogramming such controllers.

Consider **claim 16, as applied to claim 4 above**, Arimitsu, as modified by Wienfield and Reichelt, disclosed the claimed invention above but fails to disclose wherein first battery powered radio device is a remote control handset.

Nonetheless, in related art, Jones discloses that a cell phone can be a remote controller and controls a television or a home entertainment system, Figure 1, paragraph [0223].

Therefore, it would have been obvious for a person with ordinary skill in the art at the time the invention was made to incorporate the teaching of Jones into the teachings of Arimitsu, which modified by Wienfield and Reichelt, for the purpose of improving

remote controlled system to enable inexpensive controllers to control multiple different devices without the hassles of preprogramming such controllers.

Consider **claim 18, as applied to claim 17 above**, Arimitsu, as modified by Wienfield and Reichelt, disclosed the claimed invention above but fails to discloses wherein the battery powered radio device is a remote controller configured to control at least one of a television and audio system.

Nonetheless, in related art, Jones discloses that a cell phone can be a remote controller and controls a television or a home entertainment system, Figure 1, paragraph [0223].

Therefore, it would have been obvious for a person with ordinary skill in the art at the time the invention was made to incorporate the teaching of Jones into the teachings of Arimitsu, which modified by Wienfield and Reichelt, for the purpose of improving remote controlled system to enable inexpensive controllers to control multiple different devices without the hassles of preprogramming such controllers.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

| | | |
|-----------------------------|-------------------|---|
| Janssen; John Jerome et al. | US 6571091 B1 | Power control method and apparatus suitable for use in a radio communication device |
| Sheynblat; Leonid et al. | US 6408196 B2 | Method and apparatus for providing reserve power in a cellular telephone |
| LEVESQUE, | US 20020065062 A1 | AUTOMATIC GSM MOBILE POWER |

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CHRISTIAN

Sheynblat, Leonid et al. US 20020016189 A1 Method and apparatus for providing reserve power in a cellular telephone

Hansson; Rolf et al. US 6339713 B1 Decreasing battery consumption of mobile terminals by decreasing monitoring of the multiple access channel downlinks

Croft; Thomas M. et al. US 6078826 A Mobile telephone power savings method and apparatus responsive to mobile telephone location

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any response to this Office Action should be **faxed to (571) 273-8300 or mailed to:**

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Hand-delivered responses should be brought to

Customer Service Window
Randolph Building
401 Dulany Street
Alexandria, VA 22314

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Junpeng Chen whose telephone number is (571) 270-1112. The examiner can normally be reached on Monday - Thursday, 8:00 a.m. - 5:00 p.m., EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edan Orgad can be reached on 571-272-7884. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Junpeng Chen
J.C./jc

EDAN ORGAD
PRIMARY PATENT EXAMINER

Edan Orgad 5/8/07